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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,484	07/18/2003	Richard J. Mahany	INT-CR-202-04	4542
7590	10/27/2005		EXAMINER	
Michael F. Williams Simmons, Perrine, Albright & Ellwood, P.L.C. Suite 1200 115 Third Street SE Cedar Rapids, IA 52401-1266			LEE, DIANE I	
			ART UNIT	PAPER NUMBER
			2876	
			DATE MAILED: 10/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/623,484	MAHANY ET AL.	
Examiner		Art Unit	
D. I. Lee		2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 23 August 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-76 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-76 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 July 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

<ol style="list-style-type: none"> 1)<input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. 	<ol style="list-style-type: none"> 4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____. 5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6)<input type="checkbox"/> Other: _____.
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DETAILED ACTION

1. Receipt is acknowledged of the Amendment filed 23 August 2005. Claims 1, 9, 25, 58, 75-76 have been amended; no claims have been canceled; and no claims have been newly added. Currently, claims 1-76 pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 58-60, 64-68, and 75 are rejected under 35 U.S.C. 102(b) as being anticipated by Thomas et al. [US 4,034,194-referred as Thomas].**

Re claims 58-60 and 75: Thomas discloses a method of troubleshooting a computerized device (a test apparatus 20) for a multi-device data handling system (an electronic cash register, ECR 50), comprising the steps of:

computerized device 20 having a readiness light located on the housing to signal whether the computerized device and the multi-device data handling system is ready for use (see col. 2, lines 26+ and figures 1-2);

signaling a device problem/error via a readiness light (see the abstract and figure 1);

initiating a diagnostic procedure via a user interface of the computerized device (i.e., the device allows the operator to initiate new diagnostic routine via a control key on the device, see the abstract);

wherein the diagnostic routines or functions are controlled by the test program stored in the ROM 80 of the device to determine whether the multi-device data handling system has

successfully completed a setup sequence (i.e., determine whether any defective area is found); and

indicating the result of the diagnostic procedure via illuminating the readiness light of the device (see col. 5, lines 25+ and figure 1).

Re claims 64-66: wherein the device includes a plurality of readiness lights, wherein each light represents specific diagnostic routine of the device (see the abstract and figure 1);

Re claims 67-68: wherein the initiated diagnostic procedure performs a check of a data collection system of the device (i.e., checking the ROM's 66 and the RAM's 68 in the CPU 64, see col. 5, lines 55+); and wherein the ROM's 66 of the CPU stores an application software component of the device (i.e., the ROM's 66 of the CPU stores program data and instruction of the device), thus diagnostic routine of a data collection system of the device (e.g., ROM's 66 of the CPU) inherently checks the application software component of the device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention

was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-24 and 76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellaumail et al. [US 6,409,086-referred as Pellaumail].

Re claims 1, 8, 10, 14, and 76: Pellaumail discloses a data handling system, comprising:

a plurality of data handling devices 10 in a terminal receiving and dispensing rack 24 (i.e., a first data handling device 10, a second data handling device 10, a third data handling device 10, and etc. each docketed into a terminal socket 28 of the dispensing rack 24), wherein each data handling devices 10 comprising a housing (see figure 1), a processor 12 for processing computer instructions, a memory located in the housing coupled to the processor and for storing information, a communication component 13 to communicate with a master station 16 (see figure 1), which teaches that each of the communication components of the data handling devices 10 inherently includes an wireless access point (such as an RF interfacing port or component, not specifically shown) to the access the radio signal 19 (see figure 1); and

a readiness/status light 21 located on said housing of said each data handling device 10 (see figure 1);

wherein said readiness light signals whether the data handling system is ready for use (see col. 5, lines 1+).

Pellaumail does not teach the data handling device communicating with each other.

However, Pellaumail teaches that the master station 16 includes a communication component 18 capable of communicating with each of the communication component 13 of the plurality of data handling devices 10 via wireless communication (via a radio signal 19) such that

the master station 16 can controls the activation of each of the handheld terminals 10 in the dispensing rack 24, wherein each of the radio 13 in the data handling devices 10 communicates its operational readiness to the master station 16 such that the master station 16 can selectively communicates with the data handling devices 10 (i.e., to control the customer selection of the data handling devices 10 in the dispensing rack 24). Therefore, the activation process of the data handling devices obviously includes the communication of each the communication 13 of the data handling device via the signal 19 from master station16.

In view of above discussion, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the data handling device's Pellaumail obviously communicating with each other in order to selectively control the activation of the data handling devices received in the dispensing rack.

Re claims 2-3, 5 and 7: wherein the first data handling device comprises a portable data collection device (an optical reader 14, which is an integrated optical indicia reader) having a visual display component and a user-input component, such as a touch screen and a keyboard (see col. 7, lines 5+ and figure 3);

Re claims 4 and 6: Although Pellaumail does not explicitly discloses the user-input component comprising a digitizer screen and a voice-input component, the visual display component and the user-input component of Pellaumail, such as a touch screen and a keyboard, are functionally equivalent to the digitizer screen and the voice-input component. Thus, It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to utilize the known digitizer screen and the voice-input component in the system of Pellaumail in order to process the digital data (e.g., the image data) and operate the system via user's voice.

Re claim 9: Although Pellaumail does not teach the second readiness light located on the second data handling device, the fact that the first readiness light located on the first data handling device provides a visual status indication of the readiness of the first data handling device, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention to provide the second readiness light on the second data handling device in order to visually indicate the operational status of the second data handling device.

Re claim 11: wherein the second data handling device comprises an optical indicia reader (an ID reader 20 , see figure 1);

Re claim 12: Although Pellaumail does not explicitly discloses a radio frequency identification tag reader, the identification device (i.e., the optical ID reader 20) of Pellaumail that read the identification data is functionally equivalent to the radio frequency identification tag reader for reading the identification data. Furthermore, Pellaumail teaches that the boundary sensing using RFID tag by utilizing a radio frequency identification device (RFID) technology in the system (see col. 8, lines 6+), it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the known radio frequency identification tag reader in the system of Pellaumail in order to read the identification data via RF signal.

Re claim 13: Although Pellaumail fails to explicitly teach the second data handling device comprises a personal computer, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to use well-known PC with an optical reader, since it has been held to within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious system design choice. *In re Leshin*, 125 USPQ 416.

Re claims 15-17: wherein the first readiness light is made to blink to indicate readiness status (see col. 4, lines 42-43) and wherein the first readiness light comprises a single light 21 or a plurality of lights 21, 38 (see col. 4, lines 65+ and figures 1 and 3).

Re claim 18: Although Pellaumail fails to explicitly teach the other signaling type of the readiness light, such as changing color. However, the readiness light made to change color to indicate readiness status is functionally equivalent to the blinking and illuminating lamp. Thus, It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to utilize the other known type of signally lamp in the system of Pellaumail in order to visually draw the user's attention. Furthermore, the examiner takes an Official Notice that signaling lamp that changes color is well-known to one of ordinary skill in the art for visually indicate the specific operation.

Re claim 19: wherein the first readiness light is illuminated until it is extinguished when the first data terminal is removed from the socket, which clearly teaches that the first readiness light is essentially continuously illuminated to signal that the data handling system is ready-to-use condition or functioning properly (see col. 5, lines 5+ and figure 3).

Re claims 20-24: Although Pellaumail does not explicitly state that the first data handling device must be successfully powered up and booted up before the first readiness light will indicate that the data handling system is ready for use, the purpose of the illuminated first readiness light visually indicates that the operational status of the data handling device is ready for use. Furthermore, Pellaumail teaches the communication channel between the first and the second data handling device since the indicating LED is controlled and activated by the second data handling device 16. Thus, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the term "ready- to-use" condition of Pellaumail obviously encompass the condition of all components of the first data handling

device has been successfully powered up and booted up before the first readiness light visually indicate that the data handling system is ready for use.

6. **Claims 25-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellaumail in view of Thomas.** The teachings of Pellaumail and Thomas have been discussed above.

Re claims 25-45: Although Pellaumail teaches that the readiness/status light 21 located on the housing as a device readiness light to signal whether the computerized device and the multi-device data handling system is ready for use, Pellaumail does not teach the specific diagnostic routine of the device.

Thomas teaches the device having a diagnostic function that performs variety of diagnostic routines (see the discussion above).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the diagnostic function that performs variety of diagnostic routines in the device of Pellaumail in order to provide a device that carry out diagnostic procedure to identify any defective component of the device. Such modification would ensure the reliability of the device prior to operating the device.

Re claims 46-56: Pellaumail fails to teach the claimed operations of the diagnostic routine. However, the fact that the diagnostic routine does not have limit as to the type of the routine, incorporating other necessary functions to the diagnostic routine would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to increase the function of the diagnostic capability. Such modification would have been an obvious extension taught by Pellaumail.

Re claim 57: Pellaumail teaches the additional memory component coupled with the computerized device to provide additional inventory data (see col. 7, lines 20+).

7. **Claims 61-63 and 69-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomas in view of what was well known in the art, as exemplified by Barton et al. [US 6,385,739-referred as Barton.** The teachings of Thomas have been discussed above.

Re claims 61-63: Although Thomas teaches that other types of indicator lamps may be used, Thomas fails to explicitly teach the other signaling type of the readiness light, such as blinking, changing color, and continuously illuminating the light.

The examiner takes an Official Notice that blinking indication lamp, changing color indication lamp, and continuously illuminating the light indication lamp are well known to one of ordinary skill in the art. Further, the examiner takes an Official Notice that in indication lamps that blink change color, and continuously illuminate the light for specific operation is well known to one of ordinary skill in the art, as evidence by Barton.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate other signaling type of the readiness light to visually draw the user's attention for particular result of the diagnostic routine.

Re claims 69-74: Thomas fails to teach the claimed operation of the diagnostic routine. However, the fact that the diagnostic routine does not have limit as to the type of the routine, incorporating other necessary functions to the diagnostic routine would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to increase the function of the diagnostic capability. Such modification would have been an obvious extension taught by Thomas.

Response to Arguments

8. Applicant's arguments filed 23 August 2005 have been fully considered but they are not persuasive.
9. Applicant argue with respect to independent claim 1 and that Pellaumail does not teach a second readiness light located on a second data-handling device that is in communication with a first data-handling device having a readiness light, the Examiner respectfully disagrees. Pellaumail discloses a data handling system having a plurality of data handling devices 10 in a terminal receiving and dispensing rack 24 (i.e., a first data handling device 10, a second data handling device 10, a third data handling device 10, and etc. each docketed into a terminal socket 28 of the dispensing rack 24), wherein each data handling devices 10 comprising a housing (see figure 1), a processor 12 for processing computer instructions, a memory located in the housing coupled to the processor and for storing information, a communication component 13 to communicate with a master station 16 (see figure 1), which teaches that each of the communication components of the data handling devices 10 inherently includes an wireless access point (such as an RF interfacing port or component, not specifically shown) to the access the radio signal 19 (see figure 1); and a readiness/status light 21 located on said housing of said each data handling device 10 (see figure 1); wherein said readiness light signals whether the data handling system is ready for use (see col. 5, lines 1+). Although Pellaumail does not explicitly teach the data handling device communicating with each other, the activating process of the data handling devices obviously includes the data handling device 13 communicating other data handling device of the dispensing rack via the signal 19 from master station16. For example, Pellaumail teaches that the master station16 includes a communication component 18 capable of communicating with each of the communication component 13 of the plurality of data handling devices 10 via wireless communication (via a

radio signal 19) such that the master station 16 can controls the activation of each of the handheld terminals 10 in the dispensing rack 24, wherein each of the radio 13 in the data handling devices 10 communicates its operational readiness to the master station 16 such that the master station 16 can selectively communicates with the data handling devices 10 (i.e., to control the customer selection of the data handling devices 10 in the dispensing rack 24).

Therefore, activation process of the data handling devices includes communication of each of the communication 13 of the data handling device via the signal 19 from master station 16. In view of above discussion, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to recognize that the data handling device's Pellaumail obviously communicating with each other in order to control the selection of activation of the data handling devices 10. Therefore, Applicant's argument on this point is not persuasive.

10. Applicant argue with respect to the rejection of independent claim 58 that Thomas does not disclose a method for troubleshooting a multi-device data handling system with a computerized device having a readiness light. It is noted by the Examiner that the recitation "a method for troubleshooting a multi-device data handling system with a computerized device" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

11. Applicant argue with respect to the rejection of claim 25 that Thomas does not disclose a method using a device readiness light on a computerized device to signal whether the computerized device and the multi-device data handling system of which it is ready for use (see

page 20, lines 4+). The Examiner respectfully disagrees. Thomas discloses a method of troubleshooting a computerized device (a test apparatus 20) for a multi-device data handling system (an electronic cash register, ECR 50), comprising the steps of computerized device 20 having a readiness light located on the housing to signal whether the computerized device and the multi-device data handling system is ready for use (see col. 2, lines 26+ and figures 1-2); signaling a device problem/error via a readiness light (see the abstract and figure 1); initiating a diagnostic procedure via a user interface of the computerized device (i.e., the device allows the operator to initiate new diagnostic routine via a control key on the device, see the abstract); wherein the diagnostic routines or functions are controlled by the test program stored in the ROM 80 of the device to determine whether the multi-device data handling system has successfully completed a setup sequence (i.e., determine whether any fault exist); and indicating the result of the diagnostic procedure via illuminating the readiness light of the device (see col. 5, lines 25+ and figure 1). Therefore, Applicant's argument on this point is not persuasive.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gombrich, [US 4,916,441] discloses a plurality of hand-held terminal having a readiness indicating light and communicating through the base terminal.
13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE** MONTHS from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. I. Lee whose telephone number is (571) 272-2399. The examiner can normally be reached on Monday through Thursday from 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D. I. Lee
Primary Examiner
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